What Is Claimed Is:

1. A device comprising:

an airfoil having an exterior surface;

an fluid inlet opening extending through the exterior surface of the airfoil;

an fluid outlet opening separate from the fluid inlet opening;

a pump operatively connected to the fluid inlet opening and the fluid outlet opening, the pump being configured and adapted to draw fluid into the fluid inlet opening and to expel fluid from the fluid outlet opening; and

first and second valves, the first valve being operatively connected between the fluid inlet opening and the pump and the second valve being operatively connected between the pump and the fluid outlet opening, the first valve being configured and adapted to allow fluid to be drawn into the airfoil via the fluid inlet opening and to prevent fluid from being expelled from the airfoil via the fluid inlet opening, the second valve being configured and adapted to allow fluid to be expelled from the airfoil via the fluid outlet opening and to prevent fluid from being drawn into the airfoil via the fluid outlet opening.

2. A device in accordance with claim 1 wherein the device is an aircraft that further comprises a wing and wherein the

airfoil constitutes a portion of the wing.

3. An aircraft in accordance with claim 2 wherein the wing comprises a flap that forms a portion of the airfoil and that is movable relative to another portion of the airfoil, the fluid inlet opening extending through a portion of the exterior surface of the airfoil that forms a portion of the flap.

4. An aircraft in accordance with claim 2 wherein the fluid outlet opening is external to the wing.

5. A device in accordance with claim 1 wherein the first and second valves are one-way check valves.

6. A device in accordance with claim 1 wherein the pump comprises a member that partially bounds a fluid chamber and that is configured and adapted to linearly reciprocate in a manner so as to increase and decrease the volume of the fluid chamber.

7. A method comprising:

providing a device having an airfoil, the airfoil having an exterior surface and a fluid passageway, the device also having a fluid inlet opening that extends through the exterior surface of the airfoil and a fluid outlet opening that is separate from the fluid inlet opening;

intermittently drawing fluid into the fluid passageway of the airfoil from an environment external to the device via the fluid inlet opening in manner defining a plurality of intake time intervals separated by a plurality of non-intake time intervals, fluid being drawn into the fluid passageway via the fluid inlet opening during the intake time intervals, fluid not being drawn into the fluid passageway via the fluid inlet opening during the non-intake time intervals;

intermittently expelling fluid from the fluid passageway of the airfoil into the external environment via the fluid outlet opening in a manner defining a plurality of expulsion time intervals separated by a plurality of non-expulsion time intervals, fluid being expelled from the fluid passageway via the fluid outlet opening during the expulsion time intervals, fluid not being expelled from the fluid passageway via the fluid outlet opening during the non-expulsion time intervals, at least some of the expulsion time intervals occurring simultaneously with at least some of the non-intake time intervals.

8. A method in accordance with claim 7 wherein the device further comprises first and second valves, each of the first and second valves being movable between opened and closed positions, the first valve being configured and adapted to prevent fluid from flowing through the fluid inlet opening

when in its closed position and to allow fluid to flow through the fluid inlet opening when in its opened position, the second valve being configured and adapted to prevent fluid from flowing through the fluid outlet opening when in its closed position and to allow fluid to flow through the fluid outlet opening when in its opened position, the first valve being in its opened position and the second valve being in its closed position during the intake time intervals, the first valve being in its closed position and the second valve being in its opened position during the expulsion time intervals.

9. A method in accordance with claim 8 further comprising the step of cycling each of the first and second valves between their opened and closed positions by creating pressure differentials that cause the first and second valves to move between their opened and closed positions.

10. A method in accordance with claim 7 wherein at least one-hundred and fifty intake time intervals occur within one second.

11. A method in accordance with claim 7 wherein the intake time intervals are equal in duration and coincide with the non-expulsion time intervals, and wherein the expulsion time intervals are equal in duration and coincide with the non-intake time intervals.

12. A method in accordance with claim 7 wherein the device is an aircraft and wherein the step of providing the aircraft further comprises providing the aircraft in a manner such that the aircraft has a wing, the airfoil constituting a portion of the wing and the fluid outlet opening being separate from the wing.

13. A method in accordance with claim 7 wherein the device is an aircraft and wherein the step of providing the aircraft further comprises providing the aircraft in a manner such that the aircraft has a wing, the wing comprising a flap that forms a portion of the airfoil and that is movable relative to another portion of the airfoil, the fluid inlet opening extending through a portion of the exterior surface of the airfoil that forms a portion of the flap.

14. A method in accordance with claim 7 wherein the steps of intermittently drawing fluid into the fluid passageway and intermittently expelling fluid from the fluid passageway occur via linearly reciprocating a piston.

15. A method comprising:

providing a device having an airfoil, fluid inlet and fluid outlet openings, and a valve, the airfoil having an exterior surface and a fluid passageway, the fluid inlet opening extending through the exterior surface of the airfoil,

the fluid outlet opening being separate from the fluid inlet opening, the valve being movable between opened and closed positions, the valve being configured and adapted to prevent fluid from flowing through the inlet opening when in its closed position and to allow fluid to flow through the inlet opening when in its opened position;

drawing fluid into the fluid passageway of the airfoil from an environment external to the device via the fluid inlet opening, the drawing of fluid into the fluid passageway via the fluid inlet opening occurring with the first valve in its opened position;

expelling fluid from the fluid passageway of the airfoil into the external environment via the fluid outlet opening.

16. A method in accordance with claim 15 wherein the valve constitutes a first valve and wherein the device further comprises a second valve, the second valve being movable between opened and closed positions and being configured and adapted to prevent fluid from flowing through the outlet opening when in its closed position and to allow fluid to flow through the outlet opening when in its opened position, the step of drawing fluid into the fluid passageway occurring with the second valve in its closed position and the step of expelling fluid from the fluid passageway occurring with the

first valve in its closed position and the second valve in its opened position.

17. A method in accordance with claim 16 further comprising a step of cycling each of the first and second valves between their opened and closed positions at a rate of at least one-hundred and fifty Hertz.

18. A method in accordance with claim 16 wherein the device further comprises a linearly reciprocating member and wherein the steps of drawing fluid into the fluid passageway and expelling fluid from the fluid passageway occur via linearly reciprocating the linearly reciprocating member.

19. A method in accordance with claim 17 wherein the step of cycling each of the first and second valves between their opened and closed positions is performed by creating pressure differentials that cause the first and second valves to move between their opened and closed positions.

20. A method in accordance with claim 15 wherein the device is an aircraft and wherein the step of providing the aircraft further comprises providing the aircraft in a manner such that the aircraft has a wing, the wing comprising a flap that forms a portion of the airfoil and that is movable relative to another portion of the airfoil, the fluid inlet opening extending through a portion of the exterior surface of

the airfoil that forms a portion of the flap.

21. A method in accordance with claim 15 wherein the device is an aircraft and wherein the step of providing the aircraft further comprises providing the aircraft in a manner such that the aircraft has a wing, the airfoil constituting a portion of the wing and the fluid outlet opening being separate from the wing.